ABSTRACT OF DISCLOSURE

~~New and improved~~ A scanning device and ~~corresponding~~ method ~~that include and involve~~ includes a movable stage on which a specimen is positioned, ~~irradiation means which irradiates an~~ an irradiating device for electron beam ~~onto an~~ irradiation ~~region~~ of the specimen, ~~secondary beam detection means used in~~ a detection device for generating a picture of the irradiation region by detecting a secondary beam ~~which consists of at least one of~~ including secondary ~~electrons~~ or reflected electrons from the irradiation ~~region of the electron beam~~region, and an imaging electron optical system ~~which causes imaging of~~ for imaging the secondary beam on a detection ~~surface of the secondary beam detection means, and which is arranged between the specimen and the secondary beam detection means~~ surface. ~~The~~ A secondary beam ~~detection means is equipped with~~ detector including a fluorescent unit ~~which is~~ arranged on the detection ~~surface, and which converts~~ surface to convert the secondary beam into light, ~~and~~ one-dimensional line sensors ~~which have a structure arrayed in two dimensions~~ for forming electric charge by photoelectric conversion, an array imaging element ~~which continuously adds up~~ for accumulating the electric charge ~~of the accumulated image~~ in a predetermined line of the line sensors, ~~and the electric charge of the line of the image which moves accompanying the movement of the stage,~~ and a two-dimensional imaging element which emits electric charge by means of photoelectric conversion. A corresponding method is also disclosed. ~~The scanning device and corresponding method further include and involve changover means for selectively irradiating the light converted by means of the fluorescent unit to an imaging element which is either one of the array imaging elements and the two-dimensional imaging element.~~